

the arrangement of the families *Neritidae*, *Phasianellidae* and *Turbinidae* has been nearly completed."

No changes have been made in the By-Laws of the Section.

The officers of the Section for 1889 are :—

<i>Director</i> ,	. . . . .	W. S. W. Ruschenberger.
<i>Vice-Director</i> ,	. . . . .	John Ford.
<i>Recorder</i> ,	. . . . .	Edward J. Nolan.
<i>Treasurer</i> ,	. . . . .	S. Raymond Roberts.
<i>Secretary</i> ,	. . . . .	John H. Redfield.
<i>Librarian</i> ,	. . . . .	Edward J. Nolan.
<i>Conservator</i> ,	. . . . .	Henry A. Pilsbry,

Respectfully submitted,

S. RAYMOND ROBERTS,

*Recorder.*

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#### REPORT OF THE BOTANICAL SECTION.

The Vice-Director of the Botanical Section respectfully reports a continued interest on the part of the members. The membership continues about as heretofore, the meetings have been regularly attended, and many facts of great interest brought to the attention of the Section and discussed by the members. The Section is out of debt with a small surplus in its treasury.

The officers elected for the year ensuing are :—

<i>Director</i> ,	. . . . .	Dr. W. S. W. Ruschenberger.
<i>Vice-Director</i> ,	. . . . .	Thomas Meehan.
<i>Recorder</i> ,	. . . . .	Dr. Charles Schaffer.
<i>Cor. Secretary and Treasurer</i> ,	. . . . .	Isaac C. Martindale.
<i>Conservator</i> ,	. . . . .	John H. Redfield.

A most gratifying announcement is the completion of the great task of mounting all the specimens in the herbarium of North American plants as covered by *Gray's Synoptical Flora*. This was commenced in 1878, by the Conservator, Mr. John H. Redfield, assisted at various times by Messrs. F. Lamson Scribner, Isaac Burk and the late Charles F. Parker.

The encouraging growth of the herbarium noted in our former annual reports, still continues. The large number of 1039 species were added to our former list, making 28,306 as the total number of species of vascular plants represented in the herbarium.

The Conservator's report to the Section, giving the details of these additions, is added as a part of this report.

Respectfully submitted,

THOMAS MEEHAN,

*Vice-Director.*

*Conservator's Report for 1888.*—The Conservator of the Botanical Section reports that during the year closing Dec. 10th, the additions to the herbarium consist of 2525 species, of which 2296 are vascular plants, and 229 are Lichens, Fungi and Algæ. Of the 2296 species of vascular plants 1040 are believed to be new to our collection, 77 of them being of genera not before represented. 693 species are North America, 1414 are from Tropical America, 171 from the Eastern Continent, and 18 are Australian.

It is gratifying to know that the rate of increase has not declined, and that so large a portion of it is of forms not previously represented.

The most important addition of the past year is the completion of the collections made by Dr. H. H. Rusby in Bolivia and the neighboring regions in 1885 and 1886, consisting of 983 species of which nearly 600 are believed to be new to us. Including the portion of this collection received by us the previous year, the whole consists of 1433 species. These have been contributed by members of the Section, supplemented by the proceeds of duplicate plants sold by its order. Other valuable additions to our representation of the flora of Tropical America are—266 species collected by C. G. Pringle in the Province of Coahuila, Mexico, and 100 species collected in the Mexican Province of Tabasco and presented by Sr. Jose N. Roviroso, from whom we have reason to expect further contributions.

The number of species of vascular plants in the herbarium of the Academy, at the date of the last report, was estimated at . 27,267  
to which add the accession of new species of this year . 1,040  
giving the estimated present total . . . . . 28,307  
of which 8200 are North American, that is from the region covered by Gray's Synoptical Flora.

In May last was completed the work of mounting the special herbarium of North American plants. This work was begun in 1878, and has been continued from year to year in the intervals of other duties. In this the Conservator received most efficient aid

from the late Charles F. Parker, from F. L. Scribner and more recently from Mr. Isaac Burk.

A complete list of the additions to the herbarium is appended, and will appear in its proper place under the head of "Additions to the Museum."

Respectfully submitted,

JOHN H. REDFIELD,

*Conservator.*

### REPORT OF THE MINERALOGICAL AND GEOLOGICAL SECTION.

The Director of the Mineral and Geological Section of the Academy of Natural Sciences, would respectfully report that meetings of the section have been held nearly every month during the year except the summer months. Some of these have been quite well attended, at others the attendance has been small. On the whole, he regrets to say, the interest has not been as great as in former years, but this has been largely due to absence of active members from causes beyond their control.

The meetings during the latter part of the year have been better attended and more interest has been manifested than in the earlier part, so that the outlook is more favorable.

The following officers were elected to serve during the ensuing year:—

<i>Director,</i>	. . . . .	Theodore D. Rand.
<i>Vice-Director,</i>	. . . . .	Dr. W. S. W. Ruschenberger.
<i>Treasurer,</i>	. . . . .	John Ford,
<i>Conservator,</i>	. . . . .	William W. Jefferis.
<i>Recorder and Secretary,</i>	. . . . .	Dr. Charles Schaffer.

Respectfully submitted,

THEO. D. RAND,

*Director.*

### REPORT OF THE PROFESSOR OF INVERTEBRATE PALEONTOLOGY.

The Professor of Invertebrate Paleontology respectfully reports that he has during the year delivered a course of lectures on geology